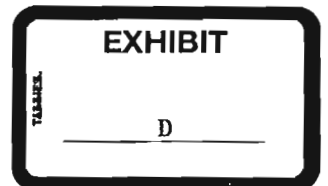


ELKINS, et al. v. American Showa, Inc.

EXPERT REPORT
James Gruber, Ph. D.



IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

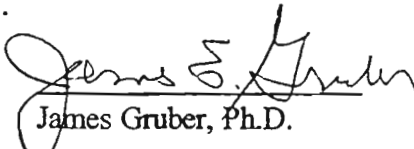
Victoria Elkins, et al. : Case No. C-1-99-988
: :
Plaintiffs, : Judge Weber
: :
vs. : Magistrate Judge Sherman
: :
American Showa, Inc., :
: :
Defendant. :

AFFIDAVIT OF JAMES GRUBER, Ph.D.

Comes now the Affiant, James Gruber, and first being duly cautioned and sworn, states as follows:

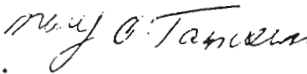
1. I am over eighteen years of age and under no disability.
2. I am a social psychologist with nearly twenty years of research and consulting experience in the area of sexual harassment.
3. The attached document details my opinions regarding the survey conducted by Louise Fitzgerald at American Showa, Inc. on October 11-12, 2001 and her analysis of the 1996-2001 American Showa Employee Surveys.
4. This opinion was requested by counsel for the Plaintiffs in the matter of Elkins, et al. v. American Showa, Inc. currently pending before this court.

FURTHER THE AFFIANT SAYETH NAUGHT.


James Gruber, Ph.D.

SWORN TO and SUBSCRIBED before me this 21 day of February, 2002 in the County of Wayne, Michigan.

My commission expires: 11/11/2003.



Mary G. Tamm
Notary Public
State of Michigan at Large

Expert Opinion of James E. Gruber, Ph.D.

In the matter of

Victoria Elkins et al. v American Showa, Inc.

**United States District Court
Southern District of Ohio
Western Division**

Introduction: Focus of the Report

I have been asked by plaintiffs' counsel to provide an independent evaluation of the survey that Dr. Louise Fitzgerald conducted at American Showa, Inc. (ASI) in October 2001 and of the ASI Employee Surveys (1996-2001) that she analyzed. In addition to her report ("Expert Opinion of Louise F. Fitzgerald, Ph.D.") dated December 19, 2001, and deposition (January 30, 2002), I have also used the raw survey data from both Dr. Fitzgerald's interviews of fifty women employees--the Work Environment Interview (WEI)--and the ASI Employee Survey (1996-2001) administered each year by American Showa. I have also used the actual Work Environment Interview forms that were completed during October 11-12, 2001. A complete list of material I reviewed is presented at the end of this report.

My report is focused on two general questions: 1) Can the ASI Employee Survey be used to gain an understanding of the sexually harassing or hostile work environment at American Showa? 2) Can the research findings of the WEI interviews conducted by Dr. Fitzgerald on October 11-12, 2001 be generalized to the female workforce at ASI?

Overview of Findings

I have reached two general conclusions as a result of a review of the material presented by Dr. Fitzgerald and my own analysis of the material used by her to form her opinion:

1) Analyses of the ASI Employee Survey data (1996-2001) do not support Dr. Fitzgerald's conclusion that a lack of sex differences across the major survey categories (e.g., pay, recognition, co-workers) is predictive of a low rate of sexual harassment and a congenial gender work environment.

- The ASI Employee Surveys cannot be used to gauge sexual harassment or a sexually hostile environment. Research studies which show a connection between sexual harassment and various measures of satisfaction reveal that sexual harassment consistently accounts for less than 10% of all the differences in satisfaction scores. This is true for research published by Dr. Fitzgerald where the SEQ is used. (see Table 1)
- Even in a work environment with a very high rate of harassment--the Armed Forces-- the differences in satisfaction between women and men are small. (see Table 2)

2) The interviews conducted by Dr. Fitzgerald in October 2001 do not yield scientifically valid and reliable measures of women's attitudes and experiences while employed at American Showa, Inc. Specifically, the responses of the fifty women to the WEI are substantially different from the female workforce at American Showa and more generally substantially different from American working women.

- The responses of the 50 interviewees to the WEI differ substantially from other women employed at American Showa, Inc. The WEI interviewees consistently gave inflated favorable responses to items that are comparable to the ASI Employee Survey. This is especially noteworthy because all the items that were compared did not contain references to gender-related experiences (see Tables 3-6)

- The responses that the WEI interviewees gave to the questions about sexual harassment resulted in extremely low levels of sexual harassment compared to the rates found in research samples of American women. This is shown by Dr. Fitzgerald's own assessment of the SEQ scores of the interviewees vis-à-vis other samples of working (non-military) women and by a comparison of WEI responses to research studies that use items similar to those of the SEQ administered at American Showa. (*see Table 7*)
- The results of the WEI are not scientifically valid and reliable and cannot be generalized to the female workforce at American Showa. The consistent pattern of inflated favorable responses and an underreporting of sexual harassment experiences by the WEI interviewees are due to the contaminating effects of contextual factors preceding the interviews (the effects of history) as well as the contaminating effects of the interview process itself (social desirability responses and self presentation concerns).
- There is evidence that at least eight women (16% of the sample) did not fully comprehend what they were being asked. Because they gave "Never" answers to questionnaire items that were used to calculate sexual harassment and ambient harassment, the actual rates of these phenomena were undercounted. Also, the WEI interviewees' knowledge of sexual harassment policies and procedures and estimates of perceived risk for complaining about sexual harassment are unreliable because there is no time frame for determining when or how these attitudes were formed.
- ***Therefore, the WEI does not yield scientifically valid and reliable information about women's experiences of sexual harassment, their perception of risk for complaining about sexual harassment, or their knowledge of policies and procedures.***

Part One: Analysis of ASI Employee Surveys (1996-2001)

Conclusion 1: The 1996 and 1997 ASI Employee Surveys do not provide a reliable basis for evaluating differences in male and female satisfaction.

Basis: Survey Response Rates.

The results from the first two years, 1996 and 1997, cannot be used to evaluate employees' opinions because the response rates to these surveys are well below the rate generally regarded by researchers as minimally adequate. The survey response rates for 1996 were 35% for women and 29% for men; the rates for 1997 were 30% for women and 18% for men. In contrast, the response rates to the 1998-2001 surveys are at least sufficient. The 2001 survey had an acceptable response rate of fifty-seven percent. The rates for the 1998-2000 surveys were higher for both women and men.

A high response rate is one type of assurance that the respondents are representative of the entire target population. A low response rate is problematic in that the nonrespondents are typically different from respondents and therefore generalizing results from a survey with a low response rate to the entire research population is likely to produce misleading results. This is such a critical issue in social research that there is an extensive body of research devoted to the nature of the problem, what impact it has on producing reliable research results, and the various techniques researchers can use (and with what effectiveness) to increase response rates to surveys and interviews (e.g., see Schuman & Ludwig, 1983; Nederhof, 1986; Miller, 1991). The low response rates for the 1996 and 1997 mail surveys prompted ASI personnel to change their strategy and administer subsequent surveys to groups of employees at work (Fitzgerald deposition, pp. 133-34). The results of this change in strategy on response rates are obvious.

I believe it is an error to include analyses from the 1996 and 1997 surveys in a report because the results cannot be used to develop reliable conclusions about women and men's satisfaction. Therefore, the analysis that follows excludes these surveys.

Conclusion 2: Results from analyses of the 1998-2001 ASI Employee Surveys that separate satisfaction scores simply on the basis of the respondent's gender do not provide us with a reasonable and meaningful basis for understanding gender-related problems in general and sexual harassment in particular.

Basis 1: Content of ASI Employee Surveys 1998-2001

The surveys do not include items relating to sexual harassment. Conducting an analysis that divides employee opinions on the basis of gender does not remedy the problem. Dr. Fitzgerald states that equal levels of satisfaction between male and female employees across the survey categories suggest low levels of sexual harassment (Fitzgerald deposition, p. 171; Fitzgerald Report, p.11). This conclusion cannot be drawn from the evidence for two reasons:

1. *The variability of work satisfaction.* Since there are no survey items that tap perceptions or experiences related to sexual harassment it is impossible to determine how individual women who fall into either a "sexually harassed" or "non-sexually harassed" score on the various satisfaction items (e.g., work, coworker, manager). Since sexual harassment rates across organizations typically cluster around 50% it is possible that the low satisfaction scores of sexually harassed women are balanced out by the high satisfaction scores of the non-harassed women. Satisfaction or dissatisfaction is related to a variety of variables including seniority, ease of combining work and family, characteristics of the job (e.g., degree of supervisory scrutiny), extrinsic rewards (pay and benefits), social prestige of a job, and prospects for personal growth that affect the way workers evaluate their peers, supervisors, and the organization as a whole (Barnett & Rivers, 1996; Ferree et al., 1999). Sexual harassment is but one of many factors that influence women's perceptions of work and relationships at work. Consequently, there is no scientific basis for concluding as Dr. Fitzgerald does that the similarity of women and men's satisfaction scores is indicative of low levels of sexual harassment.

2. *Survey wording.* The wording of the surveys makes it difficult to determine the tone of male-female relationships at ASI because they ask about "coworkers" or "manager" without specifying gender. For example, the survey items "Coworkers in this organization help each other when a problem arises," or "Overall, my coworkers are good

workers who get the job done” provide us with no clues whatsoever about gender-related problems at ASI. The fairly large size of the female workforce makes it impossible to determine whether women are thinking about men or other women when they answer the coworker questions. If there were only a very small number of women relative to men, one might have a better basis for assuming that women were thinking primarily of men as "coworkers." Because the survey asks about "employees," "workers," "co-workers," or "work groups" it is impossible to determine which people specifically the respondent had in mind when he or she completed the survey. Since the sixteen questions under "Manager" do not tap gender-related issues it is not possible to determine whether satisfaction or dissatisfaction is due to such diverse factors as the handling of sexual harassment complaints, personality characteristics of individual managers, or level of tension between labor and management.

Basis 2: Sexual harassment and male-female differences in satisfaction.

1. *Predictive power and explained variance in sexual harassment research.* There is a body of research literature to show that sexual harassment experiences impact women's attitudes toward their jobs, coworkers, and supervisors. But the issue is not just whether or not there is an impact but rather *what* the impact means. There are two basic questions about the impact of sexual harassment on work and relational (coworker, supervisory) satisfaction: (1) Predictive power: Relative to other factors that impact job satisfaction, *how important* is sexual harassment as a predictor? And (2) Explained variance: *How much of all the differences* in one variable (e.g., coworker satisfaction) are due to (or "explained" by) another (e.g., sexual harassment)?

With regard to *predictive power*, the strength of relationship between sexual harassment and work or relational satisfaction varies according to both the number and type of variables that are considered along with sexual harassment. The relationships (generally Pearson's *r* or path coefficients) between sexual harassment and work or relational satisfaction range from about .10 to .30 across a variety of samples of employed women: Autoworkers (Kauppinen & Gruber, 1993; Gruber & Bjorn, 1982), military personnel (Fitzgerald et al. 1999), construction workers (Goldenhar et al., 1998), university staff (Schneider, Swan, & Fitzgerald, 1997), Federal government employees

(USMSPB, 1994), and many others. However, the issue of predictive *power* (e.g., Does sexual harassment consistently correlate with job or relational satisfaction across a variety of studies?) is always tempered by the second issue—*explained variance*.

Explained variance tells us to what extent a predictor (individual item or scale) accounts for *all the differences* in a target variable. Because most complex social phenomena have multiple causes and correlates, our measures and scales—even if they are empirically sound and regarded by our peers—often account for a small amount of the explained variance in a predicted outcome. Explained variance is generally presented as a percentage: The *higher* the percentage, the better a variable accounts for a sizeable portion of all the differences in a predicted outcome. So, for example, if we examined the responses of women at American Showa to the sixteen questions under the heading of "Manager" on the annual ASI survey we might ask how much of the differences among their answers might be due to sexual harassment? Since the ASI surveys don't include questions about sexual harassment, a reasonable way to answer this is by examining research that uses the SEQ to predict differences in coworker, supervisor, and work satisfaction. (See Table 1). A number of the items in the satisfaction scales used in Dr. Fitzgerald's research overlap with those in the ASI annual employee survey and in the Work Environment Interview that she used at Showa. The scales created from the individual items all have high reliability ratings.

Dr. Fitzgerald uses correlation and path coefficients in her published research to determine how much variance in coworker, supervisor, and work satisfaction is explained by sexual harassment (as measured by the SEQ). The explained variance figures (see percentages under "explained %" in Table 1) show that *sexual harassment as measured by the SEQ-DoD or SEQ-W explains less than 10% of the differences in women's satisfaction with their coworkers, supervisors, or jobs*. Conversely, this means that approximately 90% of the differences in women's answers to these questions *are due to factors other than sexual harassment* as measured by the SEQ. It is important to emphasize that sexual harassment accounted for less than 6% of the satisfaction scores among women in the military-- whose sexual harassment rates exceed 78% according to Dr. Fitzgerald (Fitzgerald Report, p.16)!

TABLE 1: Correlations, Coefficients, and Explained Variance For SEQ and Work and Relational Satisfaction.

Sample	Fitzgerald, Drasgow & Magley, 1999			Fitzgerald et al. 1997			Schneider, Swan & Fitzgerald, 1997	
	Military personnel			Utility company Employees			University staff	
Coefficients*	r	path	explained %	r	path	explained %	r	explained %
<u>Scales</u>								
Coworker Satisfaction	-.30	-.21	5.7%	-.29		8.4%	-.26	6.8%
Supervisor Satisfaction	-.32	-.18	5.8%	-.18		3.2%	-.36	12.9%
Work Satisfaction	-.27	-.14	3.8%	-.09		1.8%	na	
Job Satisfaction **				-.31		9.6%		

* Pearson's r correlation is noted by "r"

** "Job Satisfaction is a composite variable consisting of the coworker, supervisor, and work satisfaction.

Sources

Fitzgerald, L., Drasgow, F, and Magley, V.(1999). Sexual harassment in the Armed Forces: A test of an integrated model. *Military Psychology, 11, 329-343.*

Fitzgerald, L., Drasgow, F., Hulin, C., Gelfand, M., and Magley, V. (1997). Antecedents and outcomes of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology, 82, 578-589.* (Utility company employees).

Schneider, K., Swan, S., and Fitzgerald, L. (1997). Job-related and psychological effects of sexual harassment in the workplace: empirical evidence from two organizations. *Journal of Applied Psychology, 82, 401-415.* (University staff and utility company employees)

A statistically significant *increase* in manager *dissatisfaction* among women employees between 1998 and 2001—during which time policies were being updated and managers were receiving sexual harassment training (Fitzgerald Report, pp.46-49) reveals the tenuous nature of Dr. Fitzgerald's arguments. Either sexual harassment increased during this time period, as Dr. Fitzgerald's argument might suggest, or a number of other factors were affecting satisfaction scores.

2. Statistical tests of differences between men and women's satisfaction scores in published research. Dr. Fitzgerald's analysis of the ASI Employee Surveys (Fitzgerald Report, Tables 1-6) finds that there are consistently no gender differences in satisfaction scores from 1996 to 2001 based on t-Tests. Do these no-difference results suggest a low level of gender hostility and sexual harassment? Even Dr. Fitzgerald's published research does not support her argument in this regard. In several research publications she and her colleagues used a job satisfaction scale that consists of three components—Coworker, Supervisor, and Work Satisfaction. The summary statistics (means and standard deviations) from her sample of military personnel are presented in Table 2. Her data reveal that there is *less than one satisfaction score difference between the averages of men and women on each scale* (see Table 2). For example, the difference between women's score on Supervisor Satisfaction (20.57) and men's (21.54) is .97; the difference on the Coworker Satisfaction scale is .47. *These small differences in satisfaction occur in a work environment where more than 78% of the women are sexually harassed.*

Therefore, since sexual harassment accounts for a small percentage of the differences in work, coworker, and supervisor satisfaction and because small gender differences in satisfaction occur in work environments with very high harassment rates, it is unwarranted to conclude as Dr. Fitzgerald does that a lack of difference between women and men on satisfaction measures on ASI Employee Surveys is indicative of a low level of sexual harassment at American Showa.

TABLE 2: Differences in Work, Coworker, and Supervisor Satisfaction Among Women and Men in the Armed Forces

Type of Satisfaction	Women		Men		Difference between Women and Men's Average Score
	<i>Average</i>	SD *	<i>Average</i>	SD	
Supervisor Satisfaction	20.57	5.88	21.54	5.44	.97
Coworker Satisfaction	10.74	2.47	11.21	2.25	.47
Work Satisfaction	50.18	10.88	50.74	10.84	.56

* SD refers to standard deviation.

Note: If these figures were based on a sample with the same size as American Showa, Inc. Employee Survey respondents and subjected to the same test Dr. Fitzgerald uses to analyze the ASI Employee Surveys there would be no statistical differences in supervisor, coworker, or work satisfaction between women and men in the military.

Source:

Fitzgerald, L., Drasgow, F., & Magley, V. (1999). Sexual harassment in the Armed Forces: A test of an integrated model. *Military Psychology*, 11, 329-43.

Part Two: Work Environment Interview (WEI)

The Work Environment Interview was administered at American Showa, Inc. on October 11-12, 2001 by Dr. Fitzgerald and her assistants. According to Fitzgerald, she conducted interviews with 50 women (not including those who received the placebo) in order "to gain a reliable and comprehensive picture of the work environment at ASI-B" (Fitzgerald Report, p. 6). Two of the most important problems that social scientists encounter during the research process are internal and external validity. These concerns encompass two types of validity: validity of the instruments and measuring devices that are used to obtain research data (Do the instruments and measures capture what they are intended to?), and the validity of findings (Can the results or findings from a research study can be generalized to a larger target population).

With regard to Dr. Fitzgerald's administration of the Work Environment Interview (WEI) we can ask two questions: (1) Did the research process occur in a manner that would allow one to make generalizations based on the findings from the WEI and apply them to the target population (women at ASI)? (2) Is the instrument (WEI) a means of providing a valid and reliable representation of the work environment for women at ASI? I will discuss what I believe are significant problems with regard to both questions.

Conclusion 3: The responses of the 50 women to the WEI are substantially different from women employees as a whole at ASI. The WEI interviewees consistently gave inflated favorable responses to items that were comparable to items in the ASI Employee Survey.

Conclusion 4: The responses of the interviewees to the sexual harassment questions in the WEI resulted in a rate of harassment that is extremely low compared to American working women.

Conclusion 5: Estimates of the level of sexual harassment or ambient harassment are not scientifically valid or reliable because women's responses were contradictory. Also, estimates of knowledge about sexual harassment policies and procedures and perceptions of risk for complaining about sexual harassment are invalid and unreliable because the WEI does not ask the respondents to give a time frame for when these opinions were formed.

Basis 1: The Research Process: Problems in the Administration of the Work Environment Survey.

I believe that there are two major factors that affected the research process and ultimately led to responses by the interviewees that do not accurately reflect the work environment for women at ASI. These factors include the validity of findings which impact the ability of Dr. Fitzgerald to generalize her results from a small sample to the larger target population.

A) Problem One: The Potential Contaminating Effects of History.

"History" refers to the fact that there were visible or noteworthy events that preceded or occurred during the data collection process that impacted research participants' attitudes and behavior. History poses a potential problem because it compromises the validity of research results and the generalizability of these results beyond the research sample.

There are three contaminating aspects of history in this case.

1) Widespread knowledge of the sexual harassment lawsuit and potential knowledge of Dr. Fitzgerald's involvement before the interviews she conducted.

Dr. Fitzgerald states that she visited the plant five times in the company of Mr. Carroll, counsel for ASI, and Ms. Collingsworth, her research assistant (Fitzgerald deposition, p 183). She states that she spent some of her time during these visits to investigate various areas of the plant on her own. She states that she "had occasion to visit every section of the plant numerous times and across all three shifts." (Fitzgerald Report, p. 8). It is quite likely that a number of employees observed the group together and may have associated them with the sexual harassment lawsuit.

The visits of Dr. Fitzgerald occurred during a time of heightened activity in the lawsuit. As one of her interviewees (#518) stated "Things get around the plant very quickly." It is likely that opinions about the lawsuit began to polarize, if they had not already done so. The polarization is evidenced by the spontaneous comments of the women Fitzgerald interviewed who blamed the plaintiffs for their own harassment, felt they were whiners, or thought they were exaggerating (Fitzgerald Report, pp. 22-23). These comments provide a sample of evidence that an objective or balanced view about the plaintiffs in particular and the work environment in general was melting in the heat of the lawsuit.

2) The collection of affidavits by attorneys representing ASI in the sexual harassment lawsuit immediately before Dr. Fitzgerald administered the WEI.

Among the documents I reviewed were a group of affidavits drafted by defense counsel and signed by ASI employees. These affidavits cover a time frame from August 2001 (Teri Weisflock) to November 2001 (Jessie Meeks, Shane Johnston, Janet Reynolds, Melissa Schwab, and Lynn Hopkins). Four of these (Nancy Grooms, Shawna Miller, Sandy Trussell, and Lisa Erwin) were signed on October 10, the *day before* Dr. Fitzgerald and her assistants began conducting interviews. The contents of the affidavits, among other things, dispute the allegations brought forward by the plaintiffs in the lawsuit, and attack the plaintiffs. From a research standpoint, this challenges the potential objectivity of the interview results because (1) it inflames passions and provokes employees to take sides, thereby distorting their views according to the side they're on; and (2) it inadvertently contaminates the research interviews conducted by Dr. Fitzgerald because both processes use a similar strategy--women are called from their jobs by an ASI representative and taken to the administrative office where they are interviewed by persons hired by ASI in its defense against the sexual harassment lawsuit (Affidavit of "Jane Doe," October 17, 2001; Fitzgerald Report, p. 6). Observers of these two interview processes could be expected to conflate them.

3) *Showing a sexual harassment training film approximately a month before Dr. Fitzgerald and her assistants conducted interviews at ASI (WEI Notes).*

Research participants who have been exposed to sexual harassment training material (videos, in particular) show short-term gains in awareness of the issue as a result of this exposure (Thomann et al., 1989; Maurizio & Rogers, 1992; Moyer & Nath, 1998). Recent exposure to sexual harassment training material approximately one month before Dr. Fitzgerald's interviews most likely heightened employees' awareness of sexual harassment issues and problems--what it is, what company policy says, to whom to report if one is a target of such behavior. The contaminating effects of History in this instance is that the responses to Dr. Fitzgerald's WEI do not provide us with *general or longer-term* employee understanding of sexual harassment policies and procedures *before* their exposure to recent training modules. She needed to provide evidence that employee knowledge of policies and procedure and their assessment of risk for complaining *had not changed significantly over time* in order to generalize the results of her interviews to the time period covered by this lawsuit.

B) Problem Two: The Potential Contaminating Effects of the Interview Situation.

Face-to-face interviews create special challenges and opportunities for the researcher. As Dr. Fitzgerald states, conducting such interviews by someone of the same gender in a private setting is generally regarded as an effective means of eliciting information on sensitive topics (Fitzgerald Report, pp. 157-58). Successful face-to-face interviews have two general requirements: The interviewees should feel confident that their identity or the information they divulge will not be revealed outside of the interview context; and, the interview process (setting, interviewer characteristics and behaviors) should be neutral so as not to influence the interviewees' responses to survey items. *Based on the material I have examined, these conditions were not met.* I believe the contaminating effects on the WEI are that: 1) The respondents did not disclose fully or gave biased responses because they feared others would gain knowledge of their answers; 2) the respondents gave survey answers they believed were of the type the interviewers were seeking.

1) Factors that may have prompted a fear of loss of anonymity or confidentiality.

There are two factors that may have led the interviewees to consider the possibility of exposure.

- Providing the interviewees with inadequate notice that they were about to participate in a study sponsored by ASI in response to the sexual harassment lawsuit.

The procedure described by Dr. Fitzgerald in her report and deposition states that: 1) The potential interviewees were approached by a Human Resources employee and asked to participate in a 20-minute interview by a team of researchers from the University of Illinois; 2) if they agreed to participate, they were taken by the HR employee to the administrative offices; 3) they were met in the outer office by Dr. Fitzgerald whom they may have already seen previously in the company of defense counsel; 4) they were taken to a private room where there were two interviewers; 5) who revealed that the team had been hired by ASI defense counsel and gave them the Consent Form to read and sign. I am troubled by the fact that this procedure does not provide the potential interviewees with sufficient time and freedom from scrutiny to give or withhold consent. The Federal guidelines on the use of human subjects published by the Department of Health and Human Services state that "An investigator shall seek such consent only under circumstances that provide the prospective subject...*sufficient opportunity to consider whether or not to participate* (italics added) and that minimize the possibility of coercion or undue influence" (45 CFR 46 1098). All federally funded research projects conducted by social scientists must abide by these guidelines. The women had already agreed to participate twice: once when HR contacted them, and a second time when they met Dr. Fitzgerald and followed her assistants to a private room. In both instances they had no knowledge of the larger role of the "researchers from the University of Illinois." After committing to an HR employee and then Dr. Fitzgerald, they were asked to agree again when they were alone in a room with two members of the research team *who only then* revealed their roles in the lawsuit. The fact that only one woman did not agree to participate at this point suggests that informed consent may have been an issue for some of the women.

- Asking the interviewees to give verbal responses to questions before two interviewers in the administrative offices of ASI.

With regard to privacy concerns, it is likely that some of the women associated the interviews with the legal affidavits. If this is the case, they may have been concerned that their answers to the interview might become public knowledge as the lawsuit proceeded. The affidavit of “Jane Doe” reveals the fear that may have affected the WEI interviewees—a concern that her words would become known to others who would use them against her and her friends and relatives in the plant. The interviewees were aware that ASI would know their names in order to pay them for their time. *It is highly likely that some—perhaps, many—of the WEI interviewees feared exposure.* I did not have the opportunity to interview them in this regard.

2) Factors that may have influenced the interviewees to give biased answers to the WEI.

- The lack of neutrality of the setting and the interviewers.

The interview was held in the administrative offices that not only represent the official location of company authority on the shop floor but the place where defense counsel had employees sign affidavits the day before the interviews began. Also, the interviewers identified themselves as persons who had been hired by ASI's defense counsel in the sexual harassment lawsuit. The fact that the interviewee was consistently escorted, accompanied, observed, and outnumbered and could not write her answers privately may have exerted subtle pressure on the interviewees to conform to what they believed were the expectations of the interviewers. The research on conformity pressure shows that people are more apt to comply when they have to make a verbal statement as opposed to a private written statement (Turner, 1991).

- Social desirability responses and self presentation concerns or agreeing-bias problems (Babbie, 2001; Norenzayan & Schwarz, 1991; Schwarz, 1999; Schuman & Presser, 1981; Neuman, 1991; Sudman & Bradburn, 1983).

Social desirability and self presentation are major reasons why participants in research edit their comments. *Social desirability* refers to the tendency on the part of participants

in research to conform to what they believe are the expectations of the researcher. These behaviors are also known as *demand characteristics* (i.e., research respondents do what they believe is "demanded" of them). Social desirability responses are prompted by clues in the context (e.g., research setting, characteristics of the interviewer or his/her facial expressions and body language, research sponsor). Therefore, it is important that researchers not divulge their intentions for doing the study or communicate their biases or expectations or those of their sponsors in order to obtain genuine responses. To do so either intentionally or inadvertently would contaminate the research results. An interviewer "should be a neutral medium through which questions and answers are transmitted" (Babbie, 2001). *Self presentation* concerns affect research participants as they edit their comments so as not to "lose face" in front of the researchers. They refrain from divulging information that they believe is contrary to the attitudes or expectations of the researcher. Together the social desirability responses and self presentation concerns of research participants influence them to slant their stated opinions *toward* what they believe are the opinions of the researcher and *away* from positions they believe are not acceptable in the eyes of the researcher. These tendencies are increased by the participants' fear of loss of anonymity or loss of confidentiality.

Basis 2: Problems Relating to the Content of the Work Environment Interview

A second set of issues with regard to Dr. Fitzgerald interviews of woman at ASI is the content of the interview schedule itself. A primary concern is not only what was asked but also *what was not asked*.

1) The Sexual Experiences Questions (SEQ).

Dr. Fitzgerald refers to an 18-item SEQ in the references and footnotes of her report (Fitzgerald Report, pp. 17-18) but uses a 14-item survey in the Work Environment Survey. She and her colleagues have also created a 25-item scale (SEQ-DOD) for women in the military. It is true, as Dr. Fitzgerald states, that researchers often interchange scale items, change items to respond to increased knowledge about the subject matter or to adapt items to a particular population (Fitzgerald Deposition, pp. 100-15). This does not explain why she chose *these particular* fourteen items or why she

chose only fourteen.¹ While it is true as she states that scale items can often be changed without adversely affecting scale reliability, it is also true that including or omitting items may affect estimates of *prevalence* or the overall rate at which the phenomena in question occur. In a review of sexual harassment studies published before 1990 I found that the number of items or questions on sexual harassment impacted prevalence: Fewer items resulted in lower prevalence or an under-counting of probable rates of sexual harassment (Gruber, 1990)

A comparison of the SEQ-W (1995) and the SEQ given to ASI employees finds that five items were omitted in the latter: 1) staring, leering at you; 2) made crude sexual remarks; 3) unwanted sexual attention; 4) subtly threatened you; and 5) made forceful attempts to have sex with you. Since the last item has a very low prevalence rate across a large number of research studies, there is a sound rationale for not including this particular item. An item that doesn't appear in the SEQ-W but is part of the SEQ-DoD and is included in the Showa survey is "Made crude or obscene gestures." Given the pool of items available to her it is not clear to me why the particular items were included in the SEQ she administered at ASI. A rationale needs to be provided for evaluation.

2) Questions Assessing Risk and Knowledge of Sexual Harassment Policies and Procedures.

The questions assessing women's perception of risk for complaining about sexual harassment do not ask the interviewees to give a time frame. Generally, this is not a problem since researchers typically ask respondents to think about their experiences during the previous 12 or 24 months. Since Dr. Fitzgerald's intention in the interviews was to cover the *entire* scope of the women's employment at ASI it was necessary to have time frames for perceptions of risk and knowledge of policies and procedures. Establishing time frames would have given the researchers a clearer idea of what women knew at a particular time and how this affected their perception of risk. In other words, perceptions of risk or knowledge of policies and procedures on October 11 and 12, 2001 are scientifically invalid and unreliable indicators of perceptions or knowledge

¹ To the best of my knowledge the variation of the SEQ Dr. Fitzgerald administered at ASI has not been scrutinized through peer review and published in a scholarly journal.

over a longer time frame (especially in light of heightened training efforts by ASI in the month preceding the interviews conducted by Dr. Fitzgerald).

Evidence to Support Conclusions 3, 4, and 5:

Predictions: If the answers of the interviewees were influenced by the process of the interview or by the content of the interview instrument there should be discernable patterns of response that contrast with comparable data. Specifically, one would predict that interviewees who have been influenced in these ways would:

- Give *overly positive* responses to questions about their satisfaction with various aspects of work
- *Underreport* their experiences of sexual harassment, and the impact of these experiences.
- Report knowledge of sexual harassment policies and procedures and give estimates of perceived risk for complaining that *varies significantly from* knowledge or perceptions before recent training modules.

The evidence to support or refute the existence of these biases is made on the basis of three procedures: 1) Comparing the attitudes of the 50 women interviewed by Dr. Fitzgerald to those of the larger sample of women who completed the annual ASI Employee Survey (*Internal Comparison*); 2) Comparing the results of the WEI administered by Dr. Fitzgerald to published research (*External Comparison*) and 3) comparing the consistency of the WEI interviewees throughout the interview (*Internal WEI*)

A) Internal Comparison: Work Environment Survey to ASI Employee Surveys (2000, 2001).

Though there were no items in the annual ASI Employee Survey that dealt with sexual harassment or other gender-related issues, there were a number of satisfaction items that closely paralleled those in Dr. Fitzgerald's WEI. I did two types of comparisons using the only data that were available on women's work attitudes. First, I *created scales that*

combined items concerning work satisfaction, coworker satisfaction, and manager satisfaction from the ASI Employee surveys and Fitzgerald's Work Environment Interview (see Table 3). I combined the same number of items from the ASI surveys for each of the three scales that were in the WEI in order to create scales of equal length. I used individual items from the ASI surveys that were worded similarly to the WEI items whenever possible. I then created a 5-point scale for all three surveys (ASI 2000 and 2001, WEI) following the same process for combining categories in each case. Second, I *compared similar individual items* from the ASI surveys and the WEI in order to analyze response patterns to single survey items (see Tables 4-6). Lastly, in order to facilitate comparison, I added to the tables columns marked "1 & 2" and "3 & 4" which sum the "1" and "2" categories and the "3" and "4" categories in order to provide an overview of *favorable* versus *unfavorable* opinions.

Compared to the women employees at ASI as whole, the fifty women who completed the interviews with Dr. Fitzgerald reported much more positive or favorable opinions of work, coworkers, and managers. This pattern is found consistently through Tables 3 through 6.

In Table 3 a little more than half of women employees had positive or favorable scores (see column "1 & 2") on work satisfaction (53.3% in 2001 and 59.1% in 2001) compared to eighty-four percent (84%) of the women who completed Fitzgerald's WEI. About a third of all women who completed the 2001 and 2000 surveys gave a positive or favorable satisfaction rating while 82% of the WEI women gave positive ratings to their coworkers and 69.4% did for their managers.

Tables 4-6 are analyses based on single or individual items. The response categories ("strongly agree," "not sure," etc.) are identical to the items found in the ASI Employee Survey and the WEI. Table 4 compares items that tap two aspects of work: How much employees like or enjoy the work they do and how satisfied they are as a whole with their jobs. The individual categories as well as the combined categories reveal the same pattern as that found in Table 3. WEI interviewees rated their jobs much more favorably than ASI women did as a whole. For example, 96% of the WEI interviewees but between half and two-thirds of women employees said that they liked the work they do.

TABLE 3: Comparison of ASI Employee Survey and Work Environment Interview (WEI, Fitzgerald) Scales on Work, Coworker, and Manager Satisfaction (Women only)

	<i>Very Positive</i>					<i>Very Negative</i>	
	1	2	3	4		5	
	<i>Combined</i>	<i>1 & 2</i>				<i>4 & 5</i>	
Work Satisfaction *							
ASI 2001 Survey	2.8%	53.3%	50.5	34.0%	12.1%	12.8%	.7%
ASI 2000 Survey	9.2	58.9	49.7	28.2	12.3	12.9	.6
WEI	28.0	84	56.0	16.0	0	0	0
Coworker Satisfaction							
ASI 2001 Survey	3.7%	37.0%	33.3%	41.5%	12.6%	21.5%	8.9%
ASI 2001 Survey	6.4	34.6	28.2	41.0	16.0	24.3	8.3
WEI	20.0	82.0	62.0	14.0	4.0	4.0	0
Manager Satisfaction							
ASI 2001 Survey	2.1%	30.5%	28.4%	31.9%	17.0%	37.6%	20.6%
ASI 2000 Survey	7.5	38.9	31.4	28.9	15.7	32.1	16.4
WEI	30.6	69.4	38.8	18.4	12.2	12.2	0

***Note:** The following items were combined in the ASI 2001 and 2000 surveys to create the following measures:

- Work Satisfaction (Questions 1, 2, 3, 4, and 8). Reliability (alpha): .857
- Coworker Satisfaction (Questions 41, 43, 44, 45, 48, and 49). Reliability: .933
- Manager Satisfaction (Questions 57, 59, 61, 64, and 65). Reliability: .964

**TABLE 4: Comparison of Individual Survey Items on Work from ASI
Employee Surveys and Work Environment Survey (Women only)**

	1 Strongly Agree	2 Agree	3 Not Sure	4 Disagree	5 Strongly Disagree
Combined	1 & 2			4 & 5	

ASI Q1: I enjoy the work I do
WEI (JobSat3): You like the work you do?

ASI 2001	11.9%	56.7%	44.8%	33.1%	7.7%	9.8%	2.1%
ASI 200	14.5	66.9%	52.4	23.5	6.6	9.6	3.0
WEI	34.0	96.0%	62.0	2.0	2.0	2.0	0

ASI Q8: Overall, I am satisfied with my job.
WEI (JobSat5): You are satisfied with your job as a whole.

ASI 2001	6.3%	57.0%	50.7%	32.4%	7.0%	10.5%	3.5%
ASI 2000	14.5	63.9	49.4	22.1	5.4	9.0	3.6
WEI	26.0	84.0	58.0	12.0	4.0	4.0	0

TABLE 5: Individual Items (Coworker Satisfaction) from ASI Employee Surveys and Work Employment Survey (Women only)

	1 Strongly Agree	2 Agree	3 Not Sure	4 Disagree	5 Strongly Disagree
Combined	1 & 2				4 & 5

ASI Q41: Overall, my coworkers are good workers who get the job done.

WEI (CowSat3): Your coworkers put in the effort required to do the job?

ASI 2001	5.6%	59.4%	53.8%	25.9%	8.4%	14.7%	6.3%
ASI 2000	15.2	62.5	47.3	22.4	11.5	15.1	3.6
WEI	22.0	74.0	52.0	12.0	14.0	14.0	0

ASI Q 45: Coworkers in this organization help each other when a problem arises.

WEI (CowSat6): The people in your workgroup are willing to help each other?

WEI (Work15): Associates help each other out.

ASI 2001	4.2%	43.4%	39.2%	33.6%	13.3	23.1%	9.8%
ASI 2000	6.3	42.3	36.0	29.3	17.7	28.7	11.0
WEI (CoSat6)	20.0	86.0	66.0	6.0	8.0	8.0	0
WEI (Work15)	20.0	94.0	74.0	0	2.0	6.0	4.0

ASI Q43: There is trust and confidence among coworkers in this organization.

WEI (Work 18): Associates treat each other with respect.

ASI 2001	2.1%	28.7%	26.6%	37.1%	19.6%	34.3%	14.7%
ASI2000	7.3	32.3	25.0	32.1	17.7	34.8	17.1
WEI	6.0	62.0	56.0	20.0	16.0	18.0	2.0

TABLE 6: Individual Items (Manager and Organization Satisfaction) from ASI Employee Surveys and Work Environment Interview (Women only)

	1	2	3	4	5
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
	<i>Combined 1 & 2</i>			<i>4 & 5</i>	

ASI Q50: My manager treats everyone fairly.
 WEI (SupSat2): Your section head treats the associates fairly.
 WEI (Work14): Associates are treated fairly.

ASI 2001	22.9%	35.0	12.1%	27.1%	32.9%	37.9%	5.0%
ASI 2000	18.9	28.7	9.8	27.4	33.5	43.9	10.4
WEI (SupSat2)	30.0	68.0	38.0	12.0	18.0	20.0	2.0
WEI (Work14)	16.0	70.0	54.0	18.0	8.0	12.0	4.0

ASI Q 65: Overall, I am satisfied with my manager
 WEI (SupSat4): You're satisfied with your section head?

ASI 2001	6.3%	34.5%	28.2%	27.5%	16.2%	37.9%	21.8%
ASI 2000	12.8	28.7	28.7	28.0	11.6	43.9	18.9
WEI	36.0	76.0	40.0	10.0	14.0	14.0	0

ASI Q 26: In general, employees of this organization receive the recognition they deserve for the work they do.

WEI (Work1): Associates at Showa are praised for the good work they do.
 WEI (Work12): Associates hard work is appreciated.

ASI 2001	2.1%	23.3%	26.2%	30.5%	27.0	41.2%	14.2%
ASI2000	2.4	29.1	26.7	29.7	26.1	41.3	15.2
WEI (Work1)	6.0	70.0	64.0	10.0	20.0	20.0	0
WEI (Work12)	8.0	72.0	64.0	10.0	16.0	18.0	2.0

ASI Q73: This organization listens to its employees.
 WEI (Work10): Associates' suggestions are ignored. (Reversed below to read: Associates' suggestions are not ignored.)

ASI 2001	4.3%	30.5%	26.2	36.0	18.9	33.5%	14.6
ASI 2000	.7	20.4	19.7	40.1	23.9	39.4	15.5
WEI (Work10)	14.0	54.0	40.0	28.0	16.0	18.0	2.0

Table 5 addresses three issues related to coworkers: getting the job done, helping out each other, and professional attitudes. Seventy-four percent of WEI interviewees either strongly agree or agree (1 & 2) that their peers are good workers compared to 59.4% (2001) and 62.5% (2000) of ASI women employees as a whole. The "help each other out" items reveal a similar highly positive response pattern on the part of the WEI interviewees: Between 86-94% strongly agree or agree that their coworkers help out one another compared to less than half of the general population of ASI women employees. With regard to professional treatment by their peers, over sixty percent (62%) of WEI interviews believe that associates treat each other with respect while less than one-third of ASI women believe that there is trust and confidence among coworkers.

Table 6 deals with manager and organization satisfaction and continues the pattern of Tables 3-5. . Though the key words are different in the first two comparisons--ASI surveys refer to "my manager" while the WEI asks about "your section head"--the patterns of the fairness and satisfaction items are similar to those in the previous tables and therefore strongly suggests that this distinction did not have a strong bearing on the way women responded. Finally, the two sets of items on the organization as whole--appreciating the associates for good work, and listening to its employees--show the same favorable "glow" of responses by the WEI interviewees.

B) External Comparison: Work Environment Interview to Published Research.

The results of the external comparisons show a clear pattern: WEI interviewees underreported sexual harassment experiences compared to a cross-section of American women.

1) Dr. Fitzgerald's assessment.

The first basis for comparison comes from Dr. Fitzgerald. In her deposition she states that "They (SEQ administered at ASI) are very low numbers" and "Actually, they are the best I have ever seen" (pp. 162-163). Her conclusion that the WEI figures for the SEQ are "low" is supported by other research that uses similar individual items as those found in the WEI.

2) *WEI interviewees versus American women.*

A comparison between the responses of ASI women to the SEQ items and three large samples of American women is presented in Table 7. Only items that were similar across all three studies and the WEI were included for comparison. Two studies of Federal civilian employees sponsored by the U.S. Merit Systems Protection Board focused on sexual harassment. Mail questionnaires were sent to workers across the U.S. Because these studies (1987 and 1994) have very large sample sizes and high survey response rates they represent a good cross-section of government employees throughout the country. Since these women occupy a variety of jobs (managerial, clerical, service, blue collar) they represent a cross-section of American working women. The survey of sexual harassment among military personnel was conducted by the Department of Defense in 1995. The DoD survey shows the levels of sexual harassment that women experience in highly male-dominated work environments. Research on women in the military shows that their rates of harassment are significantly higher than those found in the general population.

In contrast to the SEQ administered at ASI which asked women if they had *ever* experienced one or more of the behaviors listed during their employment at ASI, the three studies used for comparison ask about experiences in a *much narrower* time frame (24 months in the government surveys; 12 months in the DoD survey). Given both that ASI is a factory environment where the number of women did not exceed one-third of the workforce until 1995 and that the average WEI interviewee were asked about their sexual harassment experiences *over the entire time* of her employment at American Showa (they worked an average of five years at American Showa) ***one would expect the figures from the WEI to be higher than the figures for the Federal employees and approaching levels in the DoD survey.*** Blue-collar workers typically experience sexual harassment levels exceeding fifty percent. In a study of American blue-collar autoworkers, sexual harassment was pervasive—75% experienced dirty jokes and stories, 59% were queried about their sex lives, and 72% were subjected to sexist remarks about women (Kauppinen & Gruber, 1993).

Only 18% percent of the WEI interviewees said they had *ever* experienced offensive dirty jokes or stories compared to over a third of women in the Federal workforce. Only

TABLE 7: Comparison of SEQ Categories on WEI to Published Research
(Percentages)

Sexual harassment Experience (%)	WEI	USMSPB 1994	USMSPB 1987	DoD 1995
Dirty stories, sexual Jokes	18	37	35	43
Pressure for sex	2	7	9	11
Sexual materials	8	10 **	12 **	12 **
Obscene gestures	12	29 *	28 *	36 *
Pressure for dates	2	13	15	22
Touching	2	24	26	28

* Includes "letters and calls"

** Includes "stares"

Sources

Bastian, L., Lancaster, A., and Reyst, H. (1996). *The Department of Defense 1995 Sexual Harassment Survey*. Arlington, VA: Defense Manpower Data Center.

U.S. Merit Systems Protection Board (1995). *Sexual Harassment in the Federal Workplace: Trends, Progress, and Continuing Challenges*. Washington, DC: Government Printing Office.

U.S. Merit Systems Protection Board (1987). *Sexual Harassment in the Federal Workplace: Is It Still A Problem?* Washington, DC: Government Printing Office.

2% percent of the WEI interviewees said they had ever experienced pressures for a date compared to thirteen percent of Federal employees in the most recent survey. Only 2% of the WEI interviewees said they had ever experienced offensive touching compared to a quarter of Federal employees. Nearly 30% of Federal employees said they experienced offensive gestures over a two-year period but only 12% of WEI interviewees said they had ever had these experiences. *The figures for the WEI interviewees are very low—so low that these results could only come about as a result of biasing factors in the context and processes of the interview.*

C) WEI Internal Comparison: Responses to the SEQ and Ambient Harassment Questions versus Comments to an Open- Ended Question. Knowledge of sexual harassment policies and procedures and estimates of perceived risk for complaining.

The contradictions between the responses of WEI interviewees to the SEQ and Ambient Harassment items and their comments to the open-ended question at the end of the interview provide evidence that the respondents did not understand clearly what they were asked.

The information provided by the interviewees on knowledge of policies and procedures and perception of risk for complaining are unreliable because there is no time frame to guard against the potential contaminating effects of recent exposure to training or information.

Based on their responses to the open-ended question at the end of the interview, it is apparent that a number of women did not understand the SEQ and Ambient Harassment questions. Three (398, 598, 645) of the interviewees related specific experiences in the open-ended question to which they responded "Never" in the SEQ. Another five women (195, 248, 430, 518, 747) told of experiences in the open-ended question to which they said "Never" when asked about Ambient Harassment. For example, Interviewee #398 stated in the open-ended question that a coworker told her that he had dreamed about

her; kept asking her out; followed her around; and pushed her into lockers and machines. However, she said “Never” to four relevant SEQ items. Similarly, Interviewee #645 stated that Ty Redman “bad mouthed” women and didn’t treat women with respect after she had responded “Never” to the SEQ item, *Said things that put women down*. Interviewee #430 stated that “There had been some sexual harassment cases...” even though she responded “Never” earlier to the Ambient Harassment item *Being aware of the sexual harassment of your coworkers*. In a like manner, Interviewee #747 complained about the unresponsiveness of ASI to her complaint about sexual harassment even though she responded “Never” earlier in the interview to the Ambient Harassment item *Thinking that Showa does not do enough about someone who harasses others*. So, even when the WEI interviewees did talk about sexual harassment or a sexually hostile environment these experiences were not captured by the SEQ or Ambient Harassment questions.

The pattern among those who did state that they experienced ambient harassment is similar to the one described earlier: The WEI interviewees gave highly inflated favorable responses to the survey items. No more than 20% of the WEI interviewees indicated that they were either “very” or “extremely” upset by ambient harassment experiences. According to Fitzgerald, a study by Hitlan et al. (1999) found distress levels of 80%.

An inspection of the WEI survey and the responses to open-ended questions reveals two things. First, there are no specific survey items that ask the respondent to frame her answers to questions about policy or risk on the basis of time—e.g., “When did you first learn specific details about ASI sexual harassment policies and procedures? Do you think the risk of complaining about sexual harassment is greater, the same, or less than it was two years ago? Five years ago?” One of the advantages of conducting interviews is that interviewers can be trained to probe for this information. Several women mentioned spontaneously that things were different in the past. For example, interviewee #205 said that things have “Gotten a lot better recently.” Interviewee #535 stated that *in the last six months*, ASI “started terminating people for sexual harassment.” Several WEI women mentioned the training film shown in the weeks preceding Dr. Fitzgerald’s interviews as a specific point of time reference. Interviewee #248 says “*Since the video its (sexual*

harassment) gotten better.” Interviewee #508 expresses the same sentiment—“Good movie about sexual harassment—a lot stopped after that.” These transcripts provide tangible evidence of the contaminating effects of History. ***Because of recent events by ASI administration that showcase an anti-harassment stance, the results of the WEI interviews do not provide scientifically valid and reliable information on the knowledge women had of policies and procedures before these events.***

Summary

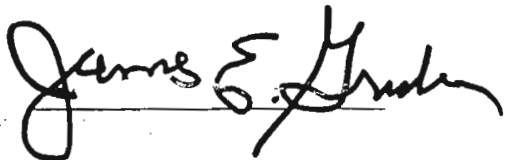
The results of my analysis of the ASI Employee Survey and the Work Environment Interview have led me to these specific findings:

- 1) Analyses of the Employee Survey data (1996-2001) do not support Dr. Fitzgerald's conclusion that a lack of sex differences across the major survey categories (e.g., pay, recognition, coworkers) is predictive of a low rate of sexual harassment or sexual hostility.
- 2) The ASI Employee Surveys cannot be used to gauge sexual harassment or a sexually hostile environment. Dr. Fitzgerald's research that correlates sexual harassment with various measures of satisfaction reveals that sexual harassment consistently accounts for less than 10% of all the differences in satisfaction scores.
- 3) Dr. Fitzgerald's research on a work environment with very high rates of sexual harassment shows that the differences in satisfaction between women and men are small.
- 4) The interviews conducted by Dr. Fitzgerald in October 2001 do not yield results that can be used reliably to measure women's attitudes and experiences while employed at American Showa, Inc. The responses of the fifty women to the WEI vary substantially from the female workforce at American Showa and more generally vary substantially from American working women.
- 5) The WEI interviewees consistently gave inflated favorable responses to items that are comparable to items in the ASI Employee Survey.
- 6) Dr. Fitzgerald's own assessment of the SEQ scores of the interviewees vis-à-vis other samples of working (non-military) women, as well as a comparison of WEI responses to research studies that use items similar to those found in the SEQ administered at American Showa reveal that the WEI interviewees had extremely low rates of sexual harassment—rates that could result only from biases in the responses of women to the WEI.
- 7) The inflated favorable responses by the WEI interviewees are due to the contaminating effects of contextual factors preceding the interviews (the effects of history) as well as the contaminating effects of the interview process itself (fear of loss of confidentiality, social desirability responses, self presentation concerns).

8) There is evidence that a number of women did not fully comprehend what they were being asked. Because they gave "Never" answers to questionnaire items that were used to calculate sexual harassment and ambient harassment, yet reported specific incidents of harassment to the open-ended questions, the actual rates of these phenomena were undercounted and therefore invalid and unreliable.

9) Finally, because the WEI did not attempt to establish a time frame for exposure to policies and procedures or for possible changes in risk perception, the results for these data are invalid and unreliable because of likely contamination by a sexual harassment training film that was shown a few weeks before the WEI interviews and by recent high-profile actions by WEI administrators.

10) **Therefore, neither the ASI Employee Surveys nor the WEI administered by Dr. Fitzgerald are adequate measures of sexual harassment or a sexually hostile work environment at American Showa, Inc. The ASI surveys do not even address gender issues! Results from the WEI are invalid and unreliable because the interviews were contaminated to a significant degree by contextual factors that led the women to give biased responses, and because a number of women did not understand the questions they were asked.**



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